

the host may be merely one phase of its existence and it is difficult to state where the other phases are passed. Being an amoeba it is only reasonable to suppose that it undergoes conjugation, encystment and sporulation, as do the other members of the genus whose life histories are better known, and these may take place in the cells near the necrotic areas and if so it would ally them closely to the next two forms to be considered.

Another disease from which the human race has long suffered is *Malaria*. It was not, however, until 1880, that Laveran, a Frenchman, announced the discovery of a parasite in the blood of patients suffering from malarial fever. A few years later well-known Italian pathologists certified to the correctness of Laveran's observations and more recently these have been confirmed the world over.

The red blood cell of man is about the 1-2500th of an inch in diameter and it is within it that the life phases of the organism appear to be passed. The different forms observed may be thus summarized.

1. Inside the red blood cell irregular clear bodies showing amoeboid movements, occupying a small part or nearly the whole of the cell.

2. Colorless bodies containing pigments which appear to have taken up the whole blood cell or have even become larger than the original blood cell was.

3. Bodies having a segmented appearance.

4. Bodies broken up into spores.

5. Crescentric bodies with pigment masses.

6. Actively moving flagellate bodies smaller than the red blood cell.

Whether all these forms are merely different phases in the life history of one form or whether they represent two or more varieties is as yet unknown. It is probable, however, that there are at least two varieties judging from the clinical history of the disease, which is characterized by definitely recurring chills, at the end of twenty four, forty-eight, or seventy-two hours. The chills seem to be synchronous with the segmenting stage of the organism as these